What is claimed is:

1. A method for regulating an engine, comprising:

providing an engine including one or more combustion chambers and a source of gaseous fuel;

mixing gaseous fuel and air upstream of the one or more combustion chambers to provide a mixture of air and fuel to the engine for combustion;

driving an electric power generator with the engine, the generator being operable to provide AC electric power; and

adjusting a ratio between air and fuel in the mixture to regulate frequency of the AC electric power provided by the generator.

2. The method of claim 1 further comprising providing a fuel line to supply fuel to the engine, the fuel line including a controllable valve for regulating fuel flow therethrough, said adjusting the ratio comprising adjusting the controllable valve.

3. The method of claim 1 further comprising compensating for transient operation of the engine.

4. The method of claim 3 which includes providing a throttle configured to regulate flow of the mixture, said compensating for transient operation being performed in accordance with a throttle position.

5. The method of claim 1 which includes changing ignition timing for the one or more combustion chambers to maintain a desired rotational engine speed.

6. The method of claim 5 which includes retarding the ignition timing in response to an engine load loss of 30% or more.

7. The method of claim 5 further comprising maintaining the desired rotational engine speed by adjusting a flow of the mixture.

8. The method of claim 7 further comprising:

providing a throttle configured to regulate flow of the mixture; and

changing position of the throttle to adjust the flow of the mixture.

9. The method of claim 8 wherein said adjusting the ratio is in accordance with at least one gain multiplier, the engine includes an intake manifold, and which includes sensing manifold pressure, the at least one gain multiplier being a function of at least rotational engine speed and the manifold pressure.

10. The method of claim 1 further comprising regulating rotational speed of the engine with a PID control based on a number of multipliers selected as a function of manifold pressure.

11. A system for generating electric power, comprising:

an internal combustion engine;

an electric power generator coupled to said engine, said engine being a prime mover for said electric power generator;

a first sensor configured to sense rotational speed of said engine and output a first signal corresponding thereto;

a controller responsive to the first signal to generate a valve control signal to regulate engine speed relative to a desired rotational engine speed;

a controllable valve responsive to said valve control signal to adjust a ratio of a mixture of fuel and air provided to said engine for combustion.

12. The system of claim 11 wherein said controllable valve is provided in a fuel line for supplying gaseous fuel, said controllable valve being operable to regulate fuel flow therethrough in response to said valve control signal.

13. The system of claim 11 further comprising a throttle configured to regulate flow of said mixture, said controller being operable to compensate for transient operation of said engine at least in accordance with throttle position.

14. The system of claim 11 wherein:

said engine includes one or more combustion chambers and a corresponding one or more spark ignition devices; and

said controller being further operable to regulate said engine relative to a desired rotational engine speed by adjustment of activation timing of said one or more spark ignition devices.

15. The system of claim 11 further comprising a throttle operable to adjust flow of said mixture.

16. The system of claim 11 further comprising an intake manifold and a second sensor configured to sense a manifold pressure and output a second signal corresponding thereto, said controller being further operable to regulate said engine in accordance with at least a first gain multiplier, a second gain multiplier, and a third gain multiplier, said first gain multiplier being a first function of at least the rotational speed of said engine and the manifold pressure, said second gain multiplier being a second function of at least the rotational speed of said engine and the manifold pressure, and said third gain multiplier being a third function of at least the rotational speed of said engine and the manifold pressure.

17. A method, comprising:

operating an internal combustion engine including a manifold coupled to a number of combustion chambers;

providing a mixture of fuel and air to the combustion chambers through the manifold;

detecting a change in rotational speed of the engine;

adjusting the mixture from a first fuel-to-air ratio to a second fuel-to-air ratio in response to said detecting to regulate the rotational speed of the engine; and

driving an electric power generator with the engine during said adjusting.

18. The method of claim 17 which includes adjusting ignition timing for the combustion chambers.

19. The method of claim 18 which includes retarding ignition in response to an engine load loss of 30% or more.

20. The method of claim 17 wherein said adjusting includes changing a flow of fuel to a mixer with a controllable valve.

21. The method of claim 20 wherein the fuel is of a gaseous type.

22. The method of claim 17 which includes regulating the rotational speed of the engine in accordance with a sensed rotational engine speed and a manifold pressure.

23. The method of claim 22 wherein said regulating is further performed in accordance with intake manifold temperature and manifold pressure.

24. The method of claim 22 wherein said regulating includes estimating the air mass flow based on an emptying/filling model of the manifold.

25. The method of claim 17 wherein said adjusting includes governing the rotational speed of the engine with a PID controller.

26. The method of claim 17 which includes sensing exhaust gas oxygen and fuel mass flow.

27. The method of claim 17 which includes pressurizing the mixture provided to the manifold with a compressor driven by a turbine turned by exhaust from the engine.

28. A system comprising:

an internal combustion engine including a manifold to selectively supply a mixture of gaseous fuel and air to each of a number of combustion chambers;

means for supplying the mixture to said manifold;

means for sensing rotational speed of said engine;

means for adjusting the mixture from a first fuel-to-air ratio to a second fuel-to-air ratio in response to said sensing means to regulate engine rotational speed;

means for adjusting ignition timing for said combustion chambers; and

means for driving an electric power generator with said engine.

29. A method, comprising:

operating an internal combustion engine including a number of combustion chambers;

pressurizing a mixture of fuel and air with a compressor, the compressor being driven with a turbine turned by exhaust from the engine;

providing the mixture to the combustion chambers of the engine;

driving an electric power generator with the engine;

detecting a sudden engine load loss of 30% or more; and

retarding ignition in the combustion chambers in response to the sudden engine load loss.

30. The method of claim 29, which includes regulating rotational engine speed during said driving to maintain a desired frequency of AC electrical power provided by the generator.

31. The method of claim 30, wherein said regulating is performed as a function of sensed rotational engine speed.

32. The method of claim 31, wherein said engine includes a manifold arranged to provide the mixture to the combustion chambers and said regulating is performed as a function of sensed temperature and pressure associated with the manifold.